



## AMENDMENTS TO THE DRAWINGS

Substitute the attached drawing sheet for the drawing sheet for Figure 5 that is presently of record.

## REMARKS

The application has been amended to correct the cited informalities, to distinguish the claimed invention over the cited prior art, and to place the application into a *prima facie* condition for allowance. Substantial care has been taken to avoid the introduction of any new subject matter into the application as a result of the foregoing amendments.

The drawings have been objected to, on the basis that every claimed feature of the invention must be shown in the drawings. Specifically, the Examiner has stated that the "air valve" of claim 19, and the "clamps" of claim 22 are not shown in the drawings. In response thereto, Applicant has cancelled claims 19 and 22. In view of the foregoing, Applicant respectfully submits that the Examiner's bases for objection to the drawings should be deemed overcome, and withdrawal of the objection to the drawings is respectfully solicited.

The abstract of the disclosure has been objected to as having a minor error. In particular, the Examiner has stated that in line 4, "liner" should be replaced with -- linear --. Applicant has accordingly amended the abstract, and submits that the Examiner's basis for objection to the abstract should be deemed overcome.

The specification has been objected on the basis of several informalities. In particular, the Examiner has identified the following informalities, making reference to the specification as originally filed, not as published:

Paragraph [0004], line 3, "combustion by A" should be replaced with -- combustion byproducts. A --;

Paragraph [0005], line 5, "U.S.N o." should be replaced with -- U.S. Patent No. -- ;

Paragraph [0006], line 4, "a" should be deleted;

Paragraph [0009], line 12, "translated" should be replaced with -- translates --;

Paragraph [0027] (which actually should be par. [0026]), line 2 should be replaced with -- in Figure 2 and *in situ* installed in duct 2 in Figure 1 --;

Paragraph [0034], line 5, "hub 18" should be replaced with -- hub 80 --;

Paragraph [0039], line 8 "Figures 14 and 15." should be replaced with -- Figure 14. --.

Applicant has amended the specification as indicated, with the exception of paragraph [0039]. Because the air valve mentioned in par. [0039] is not shown in the drawings, that paragraph has been amended accordingly. In addition, Applicant has addressed various typographical corrections, at par. [0023], line 2; par. [0024], line 2; and par. [0038], line 2. Therefore, Applicant respectfully submits that all of the Examiner's bases for objection to the specification should be deemed overcome, and reconsideration and withdrawal of the objections to the specification are respectfully solicited.

Applicant has additionally amended paragraph [0038] (paragraph number in specification as filed), to change "frame 74" to -- frame 10 --, support for which is found, e.g., at paragraphs [0026], [0027], [0028], [0030] and others. Also, Fig. 5 has been amended to indicate space 76, which is identified in paragraphs [0032] and [0041] (paragraph nos. of specification as filed). Entry and acceptance of the foregoing amendments are respectfully solicited.

Claim 19 has been rejected under 35 USC 112, first paragraph, as failing to comply with the enablement requirement. Applicant has cancelled claim 19, and accordingly, respectfully submits that the Examiner's basis for rejection of claim 19 has been rendered moot.

Claims 1 - 22 have been rejected under 35 USC 112, second paragraph, as being indefinite for purportedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner has stated that: 1) in claim 1, line 3 "said U-shaped flange forming a closed loop" is unclear; 2) claim 9 is "confusing; the examiner is unable to determine the actual structure of the claim"; and 3) in claim 13, "Kevlar" is a registered trademark. In response thereto, Applicant has: 1) amended claim 1 to clarify that the "closed loop" refers to the fact that the flange extends around the periphery of the opening for the damper; 2) cancelled claim 9; and 3) added the "®" symbol and a period (.) to end the sentence. Accordingly, Applicant respectfully submits that all of the Examiner's bases for rejection

of the claims under 35 USC 112, second paragraph should be deemed overcome. Reconsideration and withdrawal of the rejections of claims 1 - 22 on the basis of 35 USC 112, second paragraph, are respectfully solicited.

Claims 1, 3 - 5, 7 - 9, 16 - 19 and 21 have been rejected under 35 USC 102(a) as being anticipated by *Dreyer et al.*, US 4,474,205. Claims 2, 6, and 14 - 15 have been rejected under 35 USC 103(a) as being unpatentable over *Dreyer et al.* in view of *Clark et al.*, US 3,178,779. Claims 10 - 11 have been rejected under 35 USC 103(a) as being unpatentable over *Dreyer et al.* in view of Machine Design, "Fluoroelastomer extends pump applications". Claims 12 - 13 have been rejected under 35 USC 103(a) as being unpatentable over *Dreyer et al.* in view of *Ryder, Jr.*, US 4,381,985. Claim 20 has been rejected under 35 USC 103(a) as being unpatentable over *Dreyer et al.* in view of *Luffel et al.*, US 6,622,366. Claim 22 has been rejected under 35 USC 103(a) as being unpatentable over *Dreyer et al.* in view of *Chatufale*, US 6,041,804. Applicant respectfully traverses the Examiner's substantive bases for rejection of the claims.

Applicant's invention of amended claim 1 comprises a seal cartridge for an industrial damper having a damper blade movable between open and closed positions. The seal cartridge comprises a flange having a U-shaped cross-section, said U-shaped flange having an inner leg and an outer leg, said U-shaped flange extending completely around an opening of the industrial damper so as to form a closed loop; and a flexible seal membrane attached to said inner and outer legs of said U-shaped flange to form an air chamber, the flexible membrane being operably configured to be collapsible upon imposition of a negative pressure within the air chamber, the flexible membrane alternatively adopting, in the absence of said negative pressure, an extended, non-collapsed position, to, in turn, bear against the damper blade in a sealing position, when the damper blade is in its closed position. (emphasis added)

Support for the amendments to claim 1, particularly with respect to the underlined limitation, is found in the specification at paragraph [0038]. This configuration has the advantage that in the event of a failure of the air compression system, or a leak in the air chamber, the flexible membrane remains in a sealing position, against the damper blade, when the blade is in its closed position, thus

preventing passage of combustion byproducts past the closed damper blade. Independent claim 4 includes the same limitation.

Therefore, as amended, Applicant respectfully submits that independent claims 1 and 4 patentably distinguish over the cited *Dreyer et al.* reference, inasmuch as there is no teaching or suggestion in the *Dreyer et al.* reference of any membrane configuration or function other than the conventional function that positive pressure in the air chamber is required in order to have the membrane prompted into a sealing position. Applicant respectfully directs the Examiner's attention to col. 4, lines 3 - 21, wherein it is described how "reinflation" of the sealing ring requires an application of 5 - 10 psi (whereas in Applicant's invention, all that is required is removal of the negative pressure). Furthermore, positive air pressure in the sealing ring is further required because the ring is preferably located on the high pressure side of the damper blade (col. 4, line 14). In view of the foregoing, Applicant respectfully submits that not only does the *Dreyer et al.* reference completely fail to teach or suggest Applicant's invention of amended claims 1 and 4, but also that it may not be combined with any other reference to do so, as that would be against the express teachings of the reference, which requires not the removal of a negative pressure, but rather the application of a positive air pressure to reinflate the sealing ring.

Applicant accordingly respectfully submits that the Examiner's substantive basis for rejection of independent claims 1 and 4 should be deemed overcome, and reconsideration and withdrawal of the rejections of claims 1 and 4 are respectfully solicited.

Inasmuch as dependent claims 2, 3, 5 - 8, 1 - 18 and 20 - 21 merely serve to further define the subject matter of amended independent claims 1 and 4, which themselves should be deemed patentable, Applicant respectfully submits that dependent claims 2, 3, 5 - 8, 1 - 18 and 20 - 21 likewise should be deemed to patentably distinguish over the cited prior art. Reconsideration and withdrawal of the rejection of dependent claims 2, 3, 5 - 8, 1 - 18 and 20 - 21, and allowance thereof are respectfully solicited.

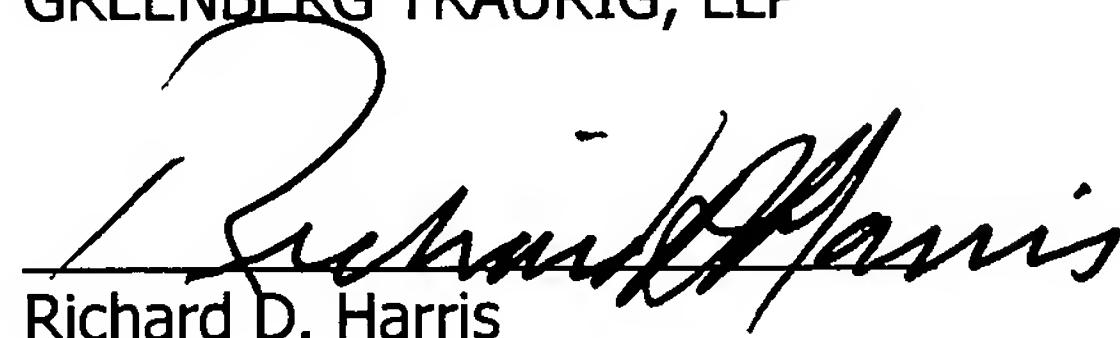


Applicant submits that the application, as a whole, is in a *prima facie* condition for allowance at this time, and reconsideration and allowance of the application, are accordingly, respectfully solicited.

Should anything further be required, a telephone call to the undersigned, at (312) 456-8400, is respectfully invited.

Respectfully submitted,

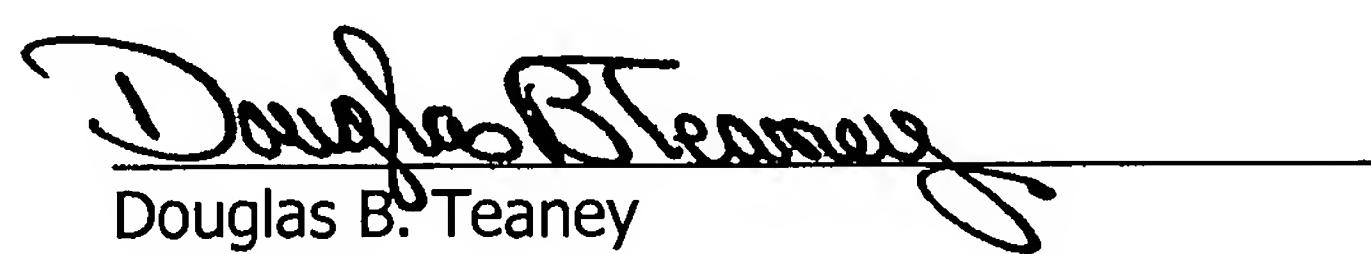
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One of Attorneys for Applicant

**CERTIFICATE OF MAILING**

I hereby certify that this AMENDMENT AND COMMUNICATION is being deposited with the United States Postal Service as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on March 27, 2006.

  
Douglas B. Teaney